

IN THE CLAIMS

Claim 1 has been amended as follows:

1. (Currently amended) An apparatus for generating acoustic waves comprising:

a volume containing an acoustic propagation medium;

an acoustic transducer comprising a first electrode, operating as

a membrane and disposed adjacent to said acoustic propagation medium, a second electrode spaced from said first electrode, a carrier comprised of x-ray transparent material on which said second electrode is disposed, and an electrolyte contained between said first electrode and said second electrode, each of first and second electrodes having a thickness making each of said first and second electrodes said substantially transparent to X-rays; and

circuitry connected to said first and second electrodes for briefly

heating said electrolyte to displace said membrane to produce an acoustic wave in said acoustic propagation medium.

Claim 2 has been amended as follows:

2. (Currently Amended) An apparatus as claimed in claim 1 comprising a housing containing[[,]] said acoustic transducer and said volume, and wherein said housing ~~and said apparatus components are also~~ is substantially transparent to X-rays.

3. (Original) An apparatus as claimed in claim 1 wherein each of said first electrode and said second electrode has a thickness in a micrometer range.

4. (Original) An apparatus as claimed in claim 1 wherein each of said first and second electrodes has a uniform structure and smooth surfaces.
5. (Original) An apparatus as claimed in claim 1 wherein each of said first and second electrodes is comprised of corrosion-resistant material.
6. (Original) An apparatus as claimed in claim 1 wherein each of said first and second electrodes is comprised of stainless steel.
7. (Original) An apparatus as claimed in claim 1 wherein each of said first and second electrodes is comprised of aluminum.
8. (Original) An apparatus as claimed in claim 1 further comprising an acoustic lens disposed in a propagation path of said acoustic wave.
9. (Original) An apparatus as claimed in claim 1 wherein at least said first electrode is concave, for focusing said acoustic wave.
10. (Original) An apparatus as claimed in claim 1 further comprising a circulatory system in fluid communication with a space containing said electrolyte between said first electrode and said second electrode, for circulating said electrolyte through said space.